SEDIMENTARY GEOLOGY — VOLUME 91 — NOS. 1-4

Special Volume:

SUBGLACIAL PROCESSES, SEDIMENTS AND LANDFORMS

Edited by:

G.F. DARDIS

AHEC, Sedimentology and Palaeobiology Lab., East Road, Cambridge, CB1 1PT, UK

and

A.M. McCABE

University of Ulster at Jordanstown, Department of Environmental Studies, Shore Road, Newtownabbey, Co. Antrim, BT37 0QB, UK

Contents

| Acknowledgements | vii |
|--|-----|
| Subglacial processes, sediments and landforms—an introduction | |
| G.F. Dardis and A.M. McCabe | 1 |
| 1. Subglacial sediments and environments | |
| Macroforms, large bedforms and rhythmic sedimentary sequences in subglacial eskers, south-central Ontario: implications for esker genesis and meltwater regime | |
| T.A. Brennand | 9 |
| Sedimentation in a subglacial lake, Enniskerry, eastern Ireland | |
| A.M. McCabe and C. Ó Cofaigh | 57 |
| Sedimentation in a drumlin lee-side subglacial wave cavity, northwest Ireland | |
| G.F. Dardis and P.M. Hanvey | 97 |
| Products of subglacial volcanic eruptions under different ice thicknesses: two examples from Antarctica | |
| J.L. Smellie and I.P. Skilling | 115 |
| Subglacial jökulhlaup deposition, Jotunheimen, Norway | |
| A.J. Russell | 131 |
| Proglacial subaquatic outwash fan and delta sediments in push moraines—indicators of subglacial meltwater activity | |
| F.M. van der Wateren | 145 |
| Glaciotectonically induced water-throughflow structures in a Late Pleistocene drumlin, Kanrawer, County | |
| Galway, western Ireland | |
| A.M. McCabe and G.F. Dardis | 173 |
| Criteria to distinguish between subglacial glaciotectonic and glaciomarine sedimentation, I. Deformation styles and sedimentology | |
| J.K. Hart and D.H. Roberts | 191 |
| Reconstructing the transport history of glacigenic sediments: a new approach based on the co-variance of clast form indices | |
| D.I. Benn and C.K. Ballantyne | 215 |

| Forms at the base of till units indicating deposition by lodgement and melt-out, with examples from the Wartanian tills near Belchatów, central Poland | |
|--|-----|
| D. Krzyszkowski | 229 |
| 2. Subglacial bedforms and their processes of formation | |
| The shape of drumlins, their distribution in drumlin fields, and the nature of the sub-ice shaping forces | |
| I. Smalley and J. Warburton | 241 |
| Large-scale ice-moulding: a discussion of genesis and glaciological significance | |
| C.D. Clark | 253 |
| Hairpin erosional marks, horseshoe vortices and subglacial erosion | |
| J. Shaw | 269 |
| Subglacial meltwater origin and subaerial meltwater modifications of drumlins near Morley, Alberta, Canada | |
| T.G. Fisher and I. Spooner | 285 |
| Drumlins of the Puget Lowland, Washington State, USA | |
| B. Goldstein | 299 |
| Drumlins in ice sheet reconstructions, with reference to the western Pennines, northern England | |
| W.A. Mitchell | 313 |
| Genesis of Boston Harbor drumlins, Massachusetts | |
| W.A. Newman and D.M. Mickelson | 333 |
| Morphology, internal composition and origin of drumlins in the southeastern part of the Chełmno-Dobrzyń | |
| Lakeland, North Poland | |
| W. Wysota | 345 |
| The Kaituri drumlin and drumlin stratigraphy in the Kangasniemi area, Finland | |
| J. Nenonen | 365 |
| Drumlin location as a response to bedrock topography on the southeastern slope of the Fennoscandian Shield | |
| A. Raukas and E. Tavast | 373 |
| | |